Holmes, Walter G.
How Shall I Learn to Teach the
Blinded Soldiers?



The american Museum Jour "How Shall I Learn to Teach the copy 2
Blinded Soldiers?"

By WALTER G. HOLMES

President and Manager of The Matilda Ziegler Magazine for the Blind 1

**T**OT a week passes that several persons do not come to me and ask what they must do to learn to teach the blinded soldiers.

When I ask what experience they have had with the blind, I usually get the reply that they have had none, and often they tell me that they have never known or talked with a blind person. I then advise them to look up someone who is blind, among the 75,000 already blind here in this country, and who needs help. Then they ask, "What can I do for him?"

On one occasion I advised a lady to find some blind persons who lived circumscribed lives and take them out to "see" the world; take them for a walk; take them to a theater; read aloud to them; take them to a museum; or, best of all, take them to the park or the woods. She asked, "Why, what good would that do them, they can't see?" And such a woman thinks she can teach the blind soldier—can lift him up and make him feel that there is yet a place for him in the world, to be useful and happy!

The word "see" has two meanings to see with the physical eye and to see or comprehend with the spiritual eveand possibly it is through the spiritual eve after all that the most of our pleasures come.

If one wants a practical demonstration of this let him take a healthy normal blind person into the woods; there show him the trees and their various sizes, explain the bark of this and that tree, and its leaves. Let him touch with his fingers the growing grass or soft mosses; let him touch and smell the blossoms of the growing plants. His sense of smell being quickened, perhaps he may get a deeper fragrance from the flower than you do. His sense of hearing has been more cultivated than yours and he will detect a sweeter note in the bird's song than you do, and will hear more in the singing of the tiny insects that fill the grass and the trees than ever comes to your ears. You would give such a person a day of infinite joy, and food for happy thought and reflection for days to come, and you would go home realizing that the blind can "see" if we will only help them to

You will find your blind friends asking you the color of each article or flower. Of course, if they have ever seen they will recall just what this or that color is, but if they have never seen they will also get a satisfaction, for they have a mental picture of each color—incorrect no doubt—but who knows that their mental picture of it may not be more beautiful than any glowing color our eyes have ever seen?

I once asked my brother, blind from infancy, to tell me his ideas of color, for he always asked the color of each new article he "saw." He told me that he got great satisfaction from knowing the color of things, but I found the realization of each color came to him as a sound. He said he knew that "red" was a dazzling color and that

<sup>&</sup>lt;sup>1</sup> The Matilda Ziegler Magazine for the Blind, of which Mr. Holmes is president and manager, is a monthly publication financed for the last ten years by Mrs. William Ziegler of New York City, at an annual expense of about \$25,000. Ten blind girls, two of whom are deaf as well as blind, are employed in collating the sheets of the magazine. The magazine is sent free each month to every blind person in the United Steepand Carellaguer. in the United States and Canada who can read.



A blind girl is operating the Braille typewriter which uses a system for the blind invented by a French teacher, Louis Braille, in which the characters are represented by raised dots. The "touch method" in typing here reaches the point of perfection



A deaf and blind girl reads proofs of The Matilda Ziegler Magazine, and records errors on the typewriter. Useful employment removes the greatest burden, idleness, from the shoulders of the blind

when one told him a thing was red it came to him as a shrill whistle; he knew that the foliage was green and a restful color, and when told a thing was green it came to him as soft music. My brother's sense of hearing is so acute that he can tell when we are passing telephone poles or lamp-posts at the edge of the sidewalk from six to ten feet away. If we are driving along a country road, he can tell by the sound when we are passing a tree and when we are in open country or in woods. This comes from the law of compensation—he has to depend on sound and he has cultivated this sense. I have heard it said that the blind can tell color by touch, but I have never seen one who could, and I do not believe that there is anyone who can do this. I do know a blind lady, though, whose sense of touch is so acute that she can tell the denominations of paper money. She really feels the ink in which the numbers on the bills are printed.

The blind, as a rule, have a keen sense of humor, which is surprising to the average person who supposes that they think gloomy thoughts only. One blind person once said to me, in complaining that most of the literature printed for them dealt with religious matters: "They seem to think that we blind can have no pleasure in this world and must always be thinking of and preparing for the next."

I remember, on one occasion, my brother and I called to see a very pious old relative in a distant state, who had never met him. She wanted in some way to express her sympathy for him and she said: "Oh, James, you should be so thankful that you

are blind, as there are so many wicked things in this world that you cannot see." At once he replied, "Well, Cousin Sarah, there are a lot of them I'd like to chance one eye on."

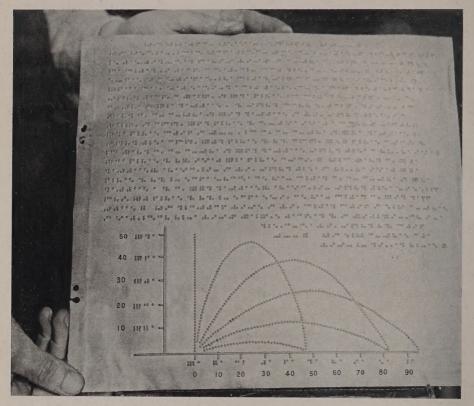
The blind do not want sympathy—they want to be treated just as other people are treated, and they do not want to be reminded constantly of their blindness, of which they already know enough by experience. A blind girl once said to me, "I wish my friends who knew me before I lost my sight would help me to forget that I am not normal, because I am, except that I do not have my sight. They are always sympathizing with me and sympathy makes me weak."

It is interesting to note that sooner or later there comes to all blinded peo-

ple a sense to detect obstacles in front of them. I have wondered if this faculty came from sound, a sort of echo. or if it came from a pressure of the atmosphere which they felt on nearing an object. Psychologists have attributed it to the latter, but I believe it comes from the former, for I have heard blind persons "clucking" or making a slight whistling sound when walking in unfamiliar places. They told me they were "sounding" to see if anything was in front of them. I am confirmed in this belief by the fact that a girl in my office, who is both deaf and blind, does not have this sense of detecting objects in front of her. This girl, however, has the sense of touch developed to an unusually high degree. I can write in ordinary script with the



Blind girls collate the sheets of *The Matilda Ziegler Magazine*.—The one week of each month which finds them thus engaged they call their "week of happiness," as they are then profitably employed. Much of the world's work could be done by the blind, and the present shortage of labor is calling attention to the fact



The range and angles of the "Big Bertha," the gun which has been shelling Paris of late, are set forth on a page of *The Matida Ziegler Magazine*. The scale of miles shows the heights and horizontal distances reached by the shells. The blind take as lively interest in the events of this world as most other people, and naturally do not appreciate the apparent attitude of many of their friends that they should only be preparing for the next

point of my finger in the palm of her hand, and she can comprehend it as rapidly as I can write it, or she can hold her hand on mine as I write with a pencil and read what I write. This girl gets a pleasurable sensation from placing her hand on the piano as it is played. She knows in this way a dozen pieces, and will repeat the words of the songs, going slowly or rapidly as you play them.

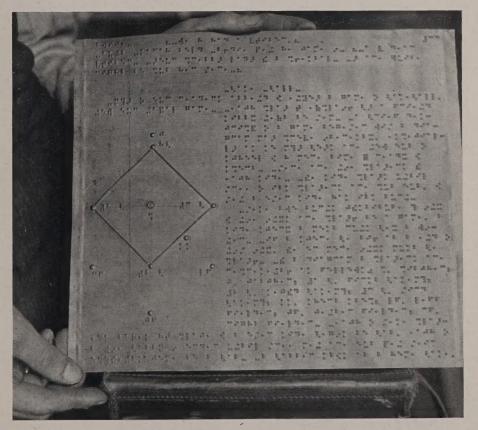
The American Museum of Natural History of New York is doing much in its special work for the blind,—the program of which is changed monthly, where they can feel the objects exhibited,—and also in its course of lectures for the blind. It has arranged with the boy scouts that they act as guides for

the blind who have no one to bring them, and it is one of the finest sights to watch one of these husky boys carefully leading a stooped old blind woman or man into the lecture hall; and it may be that he has gone away over to Brooklyn to get her. I wonder, too, if the public knows that the American Museum furnishes the car fares for those blind who are unable to pay. It is done gently, with no suggestion of charity that so hurts the blind, but the almoner sits at the door and asks, "Cannot I give you car fare for you and your guide?"

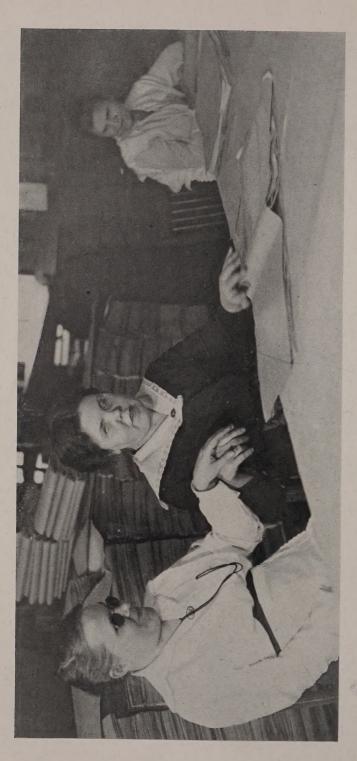
A few weeks ago I took our deafblind girl (Katherine McGirr) to the American Museum, and as the editor of this Journal and I walked with her, I placed her hand on one of the tusks of the big elephant, and then on its trunk, and at once she exclaimed, "Oh, a big elephant!" She told me she had never "seen" an elephant before, but knew it only from the descriptions she had read. She was greatly interested in a human skeleton—its smooth skull—its loose teeth—its ribs and its long fingers and toes. The big meteorite gave her great pleasure and she asked its weight, which necessitated my getting the information for her that it weighed 37,-107 lbs. This girl rarely ever forgets the hand of a person she has met once or twice. She tells the hands by the lines along the back and at the knuckles, but if the hands have just been washed and

softened with soap she has difficulty in recognizing them.

I had the pleasure of spending an evening recently in the home of Miss Helen Keller. I was accompanied by a young blind woman who sings beautifully, and of whom Miss Keller is very fond. As she sang, sitting at the piano, Miss Keller stood behind her, and by lightly resting the first finger of her left hand gently on the singer's lips and the little finger on her throat she got not only the words but the melody of the songs, her lips sometimes moving as she herself also repeated the words. Occasionally in the ecstasy of delight Miss Keller would move her right hand up and down, slowly or rapidly with



The Matilda Ziegler Magazine gives its readers a description of baseball. This game is greatly enjoyed by many blind persons, when with friends who describe the hits, home runs, and so on, as they occur. Blind persons have, as a rule, a keen sense of humor and are not at all of the gloomy turn of mind usually attributed to them



# TWO DEAF AND BLIND GIRLS EMPLOYED ON THE MATILDA ZIEGLER MAGAZINE

One is reading the magazine to the other, telling her by the manual alphabet what she reads. To those not accustomed to dealing with the blind their facility in communicating with each other by this means is marvelous.

Many are asking today what they can do to help the soldiers blinded in the war. There are many ways, but first let us realize that we have 75,000 blind in the United States already who need help and whom we can assist in a multitude of ways to become normal and happy

570

the music, and at times would throw back her head as she drank in the song. It was a beautiful picture I shall never forget. One of the songs was of roses, "the red for joy and the white for pain." When it was finished Miss Keller said, "Oh, I think the tone of your voice is so splendid on that word 'white.'" Another song was "Pitter, Patter, Little Drops of Rain," and she tapped her fingers on the singer's shoulder in accompaniment with the drops of rain on the windowpane. Later we walked in her flower garden and she knew every flower as I plucked it and showed it to her, naming at a moment's touch the pansy, the larkspur, the rose, and other flowers.

What do the blind get out of a study of nature? They get all and perhaps more than we do, but the shame is that thousands of blind sit idly in their homes—some of these too poor to be called homes. Meanwhile there are thousands of persons ready to teach the blinded soldiers and get the glamour that would come from that, and yet seldom give a thought to these others who could get so much pleasure from a friendly chat, a walk, or anything to take them out of their narrow lives and give them a chance to "see" and taste and smell and hear and feel the beauties of nature that abound just outside and beyond their narrow walls. It was Miss Keller who said, "The burden of the blind is not their blindness but their idleness." The fault that they are idle is not theirs—it is ours. We who have been blessed with sight are blameworthy. We can give the greatest pleasure to these blinded ones by helping to make them normal, happy people, and we can, too, find employment for them and lift this burden of idleness that is greater than their blindness. At any rate we can give them hours and days of pleasure, and I will guarantee that each of us will get for himself even greater pleasure in doing it.<sup>2</sup>

There are 75,000 blind in the United States. It is not likely that there will be 750 blinded soldiers, possibly not one fourth of this number. There is plenty to be done, you see, for all our blind at home in addition to the needs of the war blinded; and, besides, the Government and the Red Cross stand ready to do for every one of them.<sup>3</sup> Let us, at least, become better equipped to help the soldiers, by learning more of the neglected already blind, and of their needs.

<sup>2</sup> Just now when there is a scarcity of labor everywhere, if we look about, with a visit to some neighboring factory, we may be able to find where the blind can fill many of these needed places. A manufacturer called on me a few weeks ago and during our conversation said, "I wonder if there is any work in my place a blind person could do!" I said, "Let me go with you and see." I saw at once that there was, and the next morning two blind girls were at work there getting, and earning, \$1.25 a day. Another girl has been added since. Not one of these girls ever earned \$3.00 a week before with her knitting and similar work. The work is the manufacture of spark plugs, and the girls assemble, wrap, and box these plugs.

SA "Red Cross Institute for the Blind" has been established on the grounds of the Military Training School for Blinded Soldiers, at Cold Spring Road, Guilford, Baltimore, at the request of the Surgeon General of the United States Army. The Institute, located on a beautiful country estate, is planned to supervise the activities of blinded marines, sailors, and soldiers, after they enter civil life and to supplement the training given at the Military Training School for the Blind.

The "Committee of Direction of the Institute," as appointed by the Red Cross War Council, is made up as follows: Mr. Henry B. Wallace, chairman; Lieut. Col. C. H. Connor, vice chairman; Alfred E. Shipley, M.D.; Mr. James P. Munroe; Mr. M. C. Migel; and Lieut. Col. James Bordley, director of the Institute. The hope is that the war-blinded men can be placed in positions which will utilize as far as possible the training, experience, and interest of their work before the war. The Institute will coöperate with the educators and other workers for the blind, including libraries, the Ziegler Magazine, and other printing plants for the blind, in the production and distribution of study and reading matter.—The

<sup>&</sup>lt;sup>1</sup> If one wants to read a fascinating story, let him get the book of the blind naturalist and writer, Clarence Hawks, *Hitting the Dark Trail*, published by Henry Holt & Co.

### Note on the American Museum's Work with the Blind

HROUGH the Jonathan Thorne Memorial Fund, established in 1910, the American Museum has been enabled to develop greatly the educational work for the blind of New York City which was begun in an experimental way during the previous year. This work has been conducted along the line of public lectures for adults and of classes in the Museum for children. In addition, the schools are provided with Museum specimens of mammals, minerals, birds, and ethnological objects for use in their class work, together with small plaster cast models of these, and also with large relief globes of the world. Blind children in New York City have such limited opportunities for coming in contact with natural objects that the use of such material as the Museum affords is in itself a revelation to them, stimulating the imagination and widening the mental horizon. School work is thus made more interesting for both pupil and teacher. The number of totally or partly blind children in the grades in Manhattan, the Bronx, and

in the Washington Street School, Newark, New Jersey, is in the neighborhood of ninety. These children, in classes of from nine to ten, are brought to the American Museum by their teachers, who select the day and hour most convenient for themselves. Here the individual needs of each child are met by special instruction, since there is of necessity considerable variation in age, intelligence, and degree of blindness. Pupils are allowed to handle the objects used to illustrate the lesson and are encouraged to questions. Talks are

given by Museum instructors upon topics selected by the teachers from a list submitted to them at the beginning of the year. The list of topics for the spring of 1918 included the following: "The Earth and Neighbor Worlds," "A Journey to Africa," "Animals of the Seashore," "Animals which Fly," "Trees, Buds, and Twigs," "Baskets and Pottery of the Indians," and "The Story of the Stone Age." Also a number of talks given last year on similar subjects were repeated by request. The Museum appreciates the value set upon the instruction, as evidenced in the regular attendance of the classes and by numerous letters received from the teachers of the blind children.

Besides the blind children, the number of sightless adults with whom the Museum endeavors constantly to keep in touch is about seven hundred. Invitations are sent to all these for the free lectures prepared by the Museum especially for them. Wherever necessary carfare to and from the Museum is advanced and boy scouts kindly volunteer

to act as guides. The attendance at these lectures is usually about three hundred. The animals, birds. or flowers which form the subject of the evening talk are placed on exhibition in the foyer of the Museum where they may be handled by the audience. (See note at the bottom of the opposite page.) Among speakers at these evening talks to the blind have been Messrs. Ernest Harold Baynes, Louis Agassiz Fuertes, Ernest Thompson Seton, Charles Crawford Gorst, G. Clyde Fisher, and Admiral Robert E. Peary. -ANN E. THOMAS.



One "good turn" of the boy scouts of New York City is to act as escorts to the lectures for the blind at the American Museum of Natural History



### GETTING AN IDEA OF THE WORLD WITH THEIR FINGERS

By means of these globes, which are loaned to those public schools of New York City and Brooklyn which teach the blind, the children get their first conception of what the world is like. They realize that it is round, that it inclines on its axis, and they learn to locate its principal cities and chief physical features. They feel the heights of the mountains and the flatness of the deserts and run their fingers along the courses of rivers. When they have discovered the character of a country they are told the history of the people who occupy it, and they are allowed to handle specimens illustrating clothing and implements and native animals. Blind children who have taken a number of lessons can point to any place mentioned. They may make a journey by sea from New York southward and across the Panama Canal, or a trip by train across the continent and thence to Japan, stopping at the Hawaiian Islands on the way.

The American Museum has fifteen such relief globes, twenty-six inches in diameter. They were designed in consultation with the late Gertrude E. Bingham, supervisor of classes for the blind in New York City, and were executed by Howells' Microcosm, Washington, D. C. Great care was used in preparing them. A trial globe was made and corrected after experimental work with the children

NOTE.—The flashlight photograph reproduced on the back of the cover of this number of the JOUNNAL shows a group of blind and partly sighted persons examining mounted specimens of wild birds in the foyer of the American Museum. It is not difficult to tell from the expressions on the various faces which of the group are wholly blind and which have been surprised by the flashlight. Opportunity is afforded both before a lecture and afterward to see the objects lectured about. On the occasion of a wild-flower lecture the foyer is gay with masses of the fresh field and tree blossoms; before a bird lecture there are tables covered with the mounted birds and with bird nests. In all cases instructors are at hand to answer questions. The interest of the blind in nature is very genuine. They are especially glad when they "see" a bird or flower they have heard about but have never touched before, or when they see one perhaps known in years gone by when they were not blind. After having made the acquaintance of the birds in this way they take special pleasure in listening to the whistled bird songs



### IMAGINATION AND THE SEEING HAND

The suffering is deep that comes from a sense of unworthiness for life, of limitation which unfits one to give service to those he loves, and to take his place with others as a normal, useful member of home and society. This suffering is thrust upon children of sensitive nature who are blind. They need help in such study and play as will give them a broad vision outside themselves and a courage of spirit to fight their way into helpfulness to others and even full self-support when they are grown. Blindness does not mar the power to learn or to attain to great knowledge or wisdom; it merely requires a different channel through which sensations shall enter the brain. It does not hinder the association of ideas or formation of theories as in any child who can see. It does not hinder the action of the imagination. In fact the blind build up a very real and vivid world-and as we all know, the most beautiful world is that of the imagination. There might even be the question whether, other things being equal, one sees better with the hand or the eye. Surely it is true that the touch of the hand is very real and near, leaving nothing uncertain. This blind child can put together her reading and her various touch impressions and visualize, the traveler in Arctic shows quite as well as can the child who has gained her ideas of snow and snowshoes through her eyes



HAND AND FINGER MEMORY

He knows his household pets—especially his dog. Now, from his opportunity at the Museum, his mental vision is reaching out to include the wilderness animals. A blind child's hand becomes acutely sensitive to line and surface. It soon learns to recognize innumerable fine distinctions and slight modifications which carry to his mind a quick identification of objects. He reaches out his hand from his darkness and it is as if the light shone; he reaches it out from his isolation and he is not alone. Helen Keller, speaking of the value of the sense of touch for the blind, says in connection with her dog: "He loved it [her hand] with his tail, with his paw, with his tongue. If he could speak, I believe he would say with me that Paradise is attained by touch; for in touch is all love and intelligence." There is good evidence for the assertion that in the education of children who see we attach too little importance to the value of the sense of touch



BLIND CHILDREN LIKE "TIP," THE ASIAN ELEPHANT

Fortunately for the children of the blind classes, many specimens exhibited in the American Museum are not under glass. The children cannot quickly grasp through the sense of touch the idea of the whole of a large object, or such a thing as a garden or a room, but they can get acquainted with the parts, and the mind makes the combination. The American Museum has had made especially for use with the blind classes small plaster models (one inch to one foot) of elephant, buffalo, giraffe, camel, and hippopotamus, from which an idea of the shape and pose of the whole can be gained before studying the real object. One small blind boy, passing his fingers over the face of "Caliph," the great hippopotamus in the African hall, remarked that it must have a good disposition as the corners of its mouth turned up 576



PART OF A CLASS OF BLIND IN THE AMERICAN MUSEUM

The American Museum can give opportunities to these children not easily found elsewhere. For instance, it furnishes models illustrating methods in the history of transportation,—moccasins, canoes, pack horses, prairie schooners, steam cars, sail and steamboats, hydro-aëroplanes. It also has an accurate model of the Panama Canal. In New York the greater number of blind children and children partly blind come from the homes of the poor. As a rule they are not highly gifted intellectually. In other words they are just like the masses of all other children, except that they start with a definite handicap. The public schools of New York now provide study classes and teachers for partly blind children, with suitable medical attention and provision of raised type. These children, however, recite and receive instruction in the regular classes. Not isolating the children from normal children results in an adaptation for the later time when they must earn a livelihood among normal people



## WHETHER FOR HAND OR EYE, A SPIRIT OF INQUIRY IS THE THING

A class at the American Museum with apparatus to show the earth and the sun, direct rays of the sun (represented by wires) and rotation of the earth on its axis. It is easy for the boy's hand to read from this the eause for night and day and for summer and winter. The boy in the

The thousands of blind children in America, too young to go to school or to get the help from classes at the Museum, are wholly dependent on the mother. Will she give the special effort necessary to make her child learn through the sense of touch to know her and carry on normal childish activities in the home, so that for this blind child there will be the same result as for the child who gets its impressions by imitation and the quick understanding of the eye? Every such mother would wish to read Helen Keller's paper on "The Training of a Blind Child" (See Out of the Dark, middle is not blind but pure albino. He sees with great difficulty because of the flood of light unrestricted by pigment in the iris. pp. 188-207, Doubleday, Page and Company, 1913)



### BLIND CHILDREN AT THE AMERICAN MUSEUM, "VISUALIZING" LIFE IN THE ARCTIC

Peter is learning how the Eskimos build their summer home. He has a piece of real sealskin to put over the tent poles. Bessie, in the hackground, an extremely bright girl, is looking at a model of an Eskimo's winter igloo (blocks of plaster represent the blocks of ice). Rose Other children are examining a model of Mene, the Eskimo who came down with Peary. with the curls is caressing one of Peary's dogs (mounted).

examination before the lecture and afterward a number of Eskimo dogs (mounted) hitched to a sledge actually used on one of the Peary expeditions, so that the map showing the Arctic lands and the water about the Pole. The Museum also had ready for When Peary gave one of the American Museum's evening lectures to the blind, Mr. Holmes, of the Ziegler Mayazine for the Blind, provided every member of the audience with a flat relief

Names closely connected with the initiation of work for the blind in New York City are those of Mark Twamethod of harnessing common in the eastern Arctic might be studied,



Photograph by E. O. Hoves

LIKE A STRANGE WARSHIP OF THE NORTH

Great icebergs come from the glaciers at the head of Disco Bay or drift along the coast of Disco Island as they float southward from the glaciers of Melville Bay. Often large fleets of them ground on the bars east of Godhavn, where the sunshine and warm currents break them up into fragments. They burst apart with noise like heavy cannonading and, as the fragments topple over, they set up huge waves that break high and fiercely upon the adjacent shore or die out far from their origin

### The American Museum of Natural History Scientific Publications

### MEMOIRS

VOLUME I.—Zoölogy and Palæontology. VOLUMES II-VIII.—Anthropology.

VOLUME IX.—Zoölogy and Palæontology.

VOLUMES X-XIV.—Anthropology.

Volumes II, IV, V, VII, VIII, X-XIV, and an Ethnographical Album form the Memoirs of the Jesup North Pacific Expedition, Volumes I-X.

### MEMOIRS—NEW SERIES

VOLUME I.—Zoölogy and Palæontology. VOLUME II, part 1.—Palæontology; part 2.—Zoölogy.

### BULLETIN

Volumes I-XXIV; XXV, parts 1 and 2; XXVI-XXXVII; and XXXVIII, parts 1-14.

### ANTHROPOLOGICAL PAPERS

Volumes I-IX; X, parts 1-6; XI; XII, parts 1-5; XIII; XIV, parts 1 and 2; XV, part 1; XVI, parts 1-3; XVII, parts 1-4; XVIII, parts 1-4; XIX, part 1; XX, part 1; XXI, part 1; XXII, parts 1 and 2; XXIII, part 1; XXIV, part 1.

### **MONOGRAPHS**

A Review of the Primates. By D. G. Elliot. 3 volumes. Hitherto Unpublished Plates of Tertiary Mammals and Permian Vertebrates. By Cope and MATTHEW.

A more detailed list, with prices, of these publications may be had upon application to the Librarian of the Museum.



FLASHLIGHT PHOTOGRAPH IN THE FOYER OF THE AMERICAN MUSEUM FOLLOWING A LECTURE ON BIRDS BEFORE THE ADULT BLIND OF NEW YORK (SEE PAGE 573)



